



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/565,879

01/23/2006

Naoyuki Takamatsu

72096

7943

23872 7590 11/26/2008
MCGLEW & TUTTLE, PC
P.O. BOX 9227
SCARBOROUGH STATION
SCARBOROUGH, NY 10510-9227

EXAMINER

GOUDREAU, GEORGE A

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

11/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,879	Applicant(s) TAKAMATSU, NAOYUKI	
	Examiner George A. Goudreau	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,10,11,15-23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,10,11,15-23 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1792

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-2, 10-11, 15-23, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied in paragraph 5 of the previous office action.

4. Claims 18-23, and 25-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-In claim 18, applicant's usage of the term the term "slurry holding tank" to refer to two different tanks which are adjacent to each other is confusing since the examiner cannot discern in this claim as well as in other claims which depend upon claim 18 what tank applicant is specifically referring to.

Art Unit: 1792

5. Applicant's arguments filed 6-16-2008' have been fully considered but they are not persuasive.

Applicant argues the following points regarding the examiner's rejection of their claimed subject matter.

-Applicant's claimed cmp polishing process recites specific process parameters which desirably produce improved cmp polishing results in terms of a reduction of the amount of linear defects (i.e.-scratching of the wafer surface) which is not seen in the prior art. The prior art which was used to reject applicant's claims by the examiner fails to specifically disclose the usage of these specific process parameters. Applicant's claimed cmp process is therefore allowable over the prior art of record since applicant's claimed cmp process parameters produce unexpected results in their cmp process which is claimed by applicant.; and
-Applicant has attempted to distinguish amended claim 18 over the prior art of record which was previously used to reject applicant's claimed subject matter. The examiner must disagree.

-The prior art of record collectively teaches the usage of cmp processes with the specific process parameters which are claimed by the applicant, contrary to what applicant purports. First, Wenski et. al. teach the usage of silica abrasive particles with the specific sizes which are claimed by the applicant in their cmp slurry (i.e.-5 to 10 microns). Second, Wenski et. al. teach the usage of tetramethylammonium hydroxide to adjust the cmp slurry pH to a range of (9-12) which overlaps with applicant's claimed cmp slurry pH range of (10-13). Third,

Art Unit: 1792

Wenski et. al. teach the usage of (9-12) wt. % of tetramethylammonium hydroxide to adjust their cmp slurry pH which overlaps with applicant's claimed cmp concentration range of (greater than 10 wt. % to 20 wt. %). Thus, the prior art provides motivation to operate their cmp slurry using process parameters which overlap with applicant's claimed cmp processing parameters. Further, in order for applicant to gain benefit of any claim of unexpected results based upon the specific cmp process parameters which they use (i.e.-claim), they must do two things. First, they must make a proper showing of unexpected results with data points both inside, and outside the cmp process parameter ranges in which the unexpected results are alleged to occur. Second, applicant must claim their cmp process such that claims are commensurate in scope with any showing of unexpected results. Since applicant has failed to do either of these things, applicant has not proven to the examiner that the specific process parameters which they employ in their claimed cmp slurry are not prima facie obvious or obvious in view of In re Aller over the prior art of record as previously stated by the examiner.; and

-Applicant has failed to distinguish amended claim 18, and all of the claims which depend upon amended claim 18 via the amendments which they have made to claim 18 since the examiner cannot discern what applicant is actually attempting to claim as previously explained in paragraph 4 above. Thus, the examiner must maintain his previous rejection of these claims on this basis.

Art Unit: 1792

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication should be directed to examiner George A. Goudreau at telephone number 571-272-1434.

/George A. Goudreau/
Primary Examiner, Art Unit 1792